

21. The DNA molecule of claim 20 which comprises the nucleotide sequence set forth in SEQ. ID. NO: 19 or its complement.

22. Recombinant host cells which are modified to contain the DNA molecule of claim 19.

23. A method to produce a calcium ion channel  $\alpha_1$  subunit protein which method comprises culturing the cells of claim 22 under conditions wherein said expression system produces said protein.

24. A method to prepare cells which produce a calcium ion channel  $\alpha_1$  subunit protein which method comprises introducing into said cells the DNA molecule of claim 19.

25. An isolated DNA molecule which comprises  
(a) a nucleotide sequence that encodes the deduced amino acid sequence set forth in SEQ. ID. NO: 18 or which comprises the complement of said nucleotide sequence; or  
(b) a nucleotide sequence that hybridizes under conditions of medium hybridization stringency to the nucleotide sequence of (a) and which encodes an  $\alpha_1$  subunit of a calcium ion channel or the complement of said nucleotide sequence.

26. The DNA molecule of claim 25 which comprises a nucleotide sequence that encodes the deduced amino acid sequence set forth in SEQ. ID. NO: 18 or its complement.

27. The DNA molecule of claim 26 which comprises the nucleotide sequence set forth in SEQ. ID. NO: 18 or its complement.

28. A DNA molecule which comprises an expression system for the production of a calcium ion channel subunit  $\alpha_1$  subunit protein which expression system comprises

(a) a nucleotide sequence encoding the amino acid sequence set forth in SEQ. ID. NO: 18 or the complement of said nucleotide sequence; or

(b) a nucleotide sequence that hybridizes under conditions of medium hybridization stringency to the nucleotide sequence of (a) or the complement of said nucleotide sequence.